
Focused Logistics

Overview

The goal of Focused Logistics is to provide to the Army and other supported forces the right supplies and services, at the right place, at the right time. Accomplishment of that goal is and will continue to be the expectation and requirement of the warfighter. As the Army transforms to a capabilities-based force to meet a variety of potential threats, combat service support (CSS) must also transform to ensure logistics transformation is synchronized with the needs of the force and is consistent with the Army's goals. The transformation of those elements that arm, fuel, fix, move, maintain, and sustain the force is an integral part of creating an Objective Force that is more deployable, agile, lethal, and survivable.

Focused Logistics Goals

The three main goals of the focused logistics transformation are enhanced strategic responsiveness, reductions in logistics costs, and reductions in the logprint. Logprint is defined as the personnel, supplies, services, maintenance, materiel, and transportation required to provide logistics support to the force across the spectrum of operations. The accomplishment of these three goals is predicated on advances in equipment, technology, organizations, and business practices.

Focused Logistics Modernization in Support of Transformation

The process of modernizing CSS and focused logistics is well underway, and the investment strategy is accurately aimed at those systems and technologies which will ensure that sustainment operations of the future provide the support required by the Objective Force. At the same time, the investment strategy must ensure that currently fielded systems are upgraded to continue to support the Army that must be prepared to fight and win the Nation's wars now and in the near and mid-term. This requirement to span generations of technology is not new. Army logisticians have always been confronted with the support requirements of forces with wide ranges of technological advancement, and varying levels of modernization. The difference now and in the immediate future is that this imperative is likely to increase in significance as organizations become more disparate in structure and equipment through the transformation process. As a result, there will be an even greater demand on sustainment resources to span this technology gap between modernized and modernizing forces. In response to this requirement, the investment strategy for Focused Logistics is designed to address and meet the requirements of the Legacy, Interim and Objective Forces.

The Legacy Force

CSS modernization for the Legacy Force is a combination of the continued fielding of new systems, and the recapitalization of fielded systems with proven utility. These ongoing efforts bring us closer to the primary goals of our CSS transformation strategy, and the building blocks of that strategy are the key logistics enablers that will provide assured sustainment across the spectrum of operations. An enabler is defined as a materiel solution, automation or communications system, technology, business process change or organizational redesign, which yields a new or enhanced capability to meet a recognized requirement. Key logistics enablers currently being fielded to the Legacy Force include the Family of Medium Tactical Vehicles (FMTV) that replaces 2 1/2 and 5 ton trucks throughout the force structure. FMTV will contribute significantly to meeting the requirement for commonality among systems to simplify maintenance operations. FMTV is also being fielded to the Interim Force.

Other examples of systems being fielded to the Legacy Force that reduce the logprint are the Heavy Expanded Mobility Tactical Truck (HEMTT) and the Containerized Kitchen (CK). The HEMTT is fielded in various configurations including crane, wrecker, tanker, and load-handling variants which share common major components thereby reducing the requirement for repair parts and for different types of maintenance personnel. The CK replaces the Mobile Kitchen Trailers on a one-for-two basis, streamlining food service operations through reductions in personnel as well as in hauling and storage requirements.

These trucks that are built on a common chassis, and the field kitchen that leverages technology for more efficient operations contribute directly to reducing the logprint on the battlefield.

The second element of the plan to maintain and enhance the capabilities of the Legacy Force is the recapitalization of the HEMTT and the High Mobility Multipurpose Wheeled Vehicle (HMMWV). Both are currently fielded systems with proven battlefield utility that will be made more capable, more reliable, and more maintainable through the upgrade and/or replacement of key components. This process helps to achieve our goal of reducing the cost of logistics by maximizing the useful life of a fielded system until the Future Tactical Truck System is developed to replace the HEMTT as well as the follow-on to the HMMWV, and incorporating advanced technology to reduce operating costs.

The Interim Force

The fielding of modernized logistics systems to the Interim Force is ongoing. While there are no CSS systems designed exclusively for the Interim Force, those units are receiving modernized CSS systems currently in development that will enhance their deployability, sustainability, and reliability of the Interim Force. An example of this is the medical logistics module of the Medical Communications for Combat Casualty Care (MC4) system. This module is only one of ten that will eventually be fielded, but its capability to accelerate medical resupply and significantly reduce stockpiles makes it an invaluable asset in transforming the Army to the Interim and Objective Forces now.

The Objective Force

The Objective force CSS structure will be built around the immutable truth that sustainability must be given equal importance with the other warfighting imperatives such as lethality, deployability, and survivability. This emphasis in sustainability is essential to ensure that logistics is inextricably linked to operations, and that the logistics tempo is equal to the operations tempo. Achieving this will be dependent on the implementation of key concepts such as velocity management; anticipatory as opposed to reactionary logistics; demand reduction with regard to power, fuel, and hauling capability; reach capability—encompassing reach back, reach laterally, and reach forward; and agility to allow for the rapid redirection of resources as needed.

Our investment strategy for the Objective Force focuses on systems that will improve deployability and responsiveness, reduce the in-theater logprint, and reduce costs through efficiencies. The Theater Support Vessel (TSV) will provide intra-theater lift that will enable the Intermediate Staging Base (ISB) concept by providing responsive and capable lift immediately available to the operational commander. The TSV will mitigate the limitations imposed by undeveloped Sea and Air Ports of Debarkation, and will enhance flexibility within a theater of operations.

Advances in Test, Measurement, and Diagnostics equipment as well as Embedded Diagnostics and Prognostics, through the Army Diagnostics Improvement Program will enhance

maintenance operations by enabling multi-capable maintainers to electronically detect, isolate and identify faults and fault trends. This will provide the capability to then forecast requirements and order replacement parts in advance of failures, thereby contributing significantly to the elimination of the “Iron Mountain” of the past, and optimizing of the concept of velocity management. This capability will initially be achieved by appliqué of sensors and devices on legacy platforms, and will ultimately be an embedded component of Objective Force systems. Commanders will gain confidence that the process of anticipating requirements and having what’s needed, where and when it’s needed will eliminate the demand for large stockpiles of repair parts and replacement equipment, and maintenance personnel will be able to make necessary repairs to systems before they fail, improving readiness and keeping combat systems in the fight.

One of the most resource-intensive commodities on the battlefield is fuel. Reducing the logprint imposed by the current requirement for various types of fuel on the battlefield is achieved by the replacement of gas-burning equipment with diesel-based fuel systems such as the Modern Burner Unit. Initiatives such as this will eliminate the requirement for multiple types of fuel, thereby reducing and simplifying the requirements for transport and storage.

Automatic Identification Technology enables In-transit Visibility for Total Asset Visibility. These key enablers provide Army logisticians the capability to monitor deployments and cargo movements, divert crucial shipments, and locate critical assets to redistribute to meet user

requirements. The Movement Tracking System and the Transportation Coordinator's Automated Information Management System II that will allow decision-makers to make on-the-spot adjustments to the distribution of resources will facilitate agility on the battlefield, and in transit to the battlefield.

CSS transformation will also focus on our most valuable resource, our Soldiers. Several initiatives are ongoing which will improve the working and living conditions, and field services that maintain the health, safety and welfare of our Soldiers upon deployment. These are not luxury systems, but are those systems that contribute directly to the enhanced ability of our Soldiers to perform their mission in a variety of conditions and unit configurations. Modernization of Soldier systems is ongoing in areas as diverse as field services, with advanced laundry and bath systems to aerial insertion means such as the Advanced Tactical Parachute System that reduces parachute-landing injuries by decelerating the rate of descent for personnel in airborne operations.

As with all battlefield operating systems, robust and extensive communications and automation are essential to optimize the performance and value added of modernized systems. Logistics Assured Communications is critical to achieving distribution-based logistics and overall CSS transformation goals. Communications connectivity from the tactical to the strategic levels of logistics will ensure optimization of other changes in processes, organizations, doctrine, and platforms. It is achieved through a synergistic information and communications environment dominated

by an integrated and interoperable global, wireless, and assured communications and information technology system designed to operate on a 24/7 basis virtually anywhere on the battlefield or in the world. For the objective force, the Combat Service Support Control System and the Global Combat Support System-Army will provide those capabilities. The source of a significant portion of the data processed by these systems is the Logistics Integrated Data Base, which has synthesized information on legacy systems to provide decision-makers real-time logistics data such as readiness and property book information, maintenance status, and recommended stockage lists. The synergistic effect of these systems will be a reliable and accessible network that will support logistics business, command and control, and situational awareness from the tactical to the strategic levels. The benefits to the warfighter are total asset and in-transit visibility, logistics packages tailored to a specific requirement, quick response distribution and redistribution of supplies, and real-time and continuous access to the common operating picture.

Discussion of Key Equipment

Heavy Expanded Mobility Tactical Truck (HEMTT)

Description. The HEMTT is an 8x8 diesel powered truck. It comes in cargo with light crane, cargo with medium crane, tanker, wrecker, and load handling system (LHS) versions. The HEMTT-LHS is an FY99 Warfighter Rapid Acquisition Program (WRAP) and a CSS enabler for Division XXI and the Transformation brigades. The HEMTT-LHS is funded in the HEMTT Extended Service Program

(ESP). Displaced cargo HEMTTs are converted to HEMTT-LHS. This precludes procuring a new truck for a new mission.

Operational Requirement. The HEMTT provides fuel and ammunition for combat, CS, and CSS units. The tractor is used to pull the PATRIOT launcher. The wrecker is used in various units for vehicle recovery. The HEMTT-LHS is a key CSS enabler for the Interim Brigade Combat Team (IBCT).



Program Status. The HEMTT is currently in production. First Unit Equipped (FUE) for HEMTT-LHS was October 2000. Additional wreckers are needed to fill shortfalls for Transformation requirements. HEMTT II will support the Future Combat System, and it will transition to the Future Tactical Truck System.

Family of Medium Tactical Vehicles (FMTV)

Description. The Family of Medium Tactical Vehicles is built around a common chassis and drive train, and featuring over 80% commonality of parts and components between models and weight classes. It provides state-of-the-art automotive technology and replaces all existing 2 ½ and 5-ton trucks in the Army inventory, including cargo, van, tractor, wrecker, and dump trucks, plus companion trailers in both weight classes.

Operational Requirement. FMTV is a key enabler for Army Transformation. It provides unit mobility, resupply, and transportation at all organizational levels. It operates worldwide in all weather and terrain conditions. It serves as the weapons system platform for HIMARS and the resupply vehicle for PATRIOT. FMTV enhances crew survivability through the use of hard cabs, three-point seat belts, central tire inflation, and run-flat capability. It provides enhanced tactical mobility and is strategically deployable in C5, C17, C130, and C141 aircraft. FMTV reduces the Army's logprint by providing commonality of parts and components, reduced maintenance downtime, and significantly lower operating and support costs than older trucks.



Program Status. FMTV is in full production. XVIII Airborne Corps was the FUE in January 1996. Over 13,600 FMTVs had been fielded as of 31 October 2001. A competitive multiyear rebuy contract is scheduled for award in March 2003. Fielding will continue through 2022 at current funding levels.

Rough Terrain Container Handler (RTCH)

Description. The RTCH is the materiel handling equipment with the capability to lift the standard 20- and 40-foot long ISO

family of 8-foot wide containers weighing up to 53,000 pounds while operating on beaches, rough terrain, and unimproved surfaces. The Army's supply system relies heavily on quickly delivering ISO containers through air, sea, and rail ports of debarkation to the battlefield. This RTCH must be air deployable and provide the flexibility to handle containers and prepositioned PLS flatracks, breakbulk cargo, and heavy palletized Class V loads when equipped with a forklift attachment.



Operational Requirement. The RTCH is the key enabler and pacing item for the Transportation Cargo Transfer Company (CTC). The CTC recently underwent a reorganization to convert all Active and Reserve Component units to an Improved Cargo Handling Operations (ICHO) design, which increases the requirement for RTCHs from 8 to 16 per unit. CTSS are critical enablers to project a CONUS base force into the theater of operations. They are essential to meet the Army goal of closing five divisions with support within 30 days. It is projected that 90% of general cargo and 95% or all ammunition will arrive containerized in the theater. The RTCH is the single most important item of MHE to provide the theater commander the ability to receive, stage, and

discharge these containers. The RTCH is air transportable in C-5/C-17 in less than one hour.

Program Status. The RTCH is in full production. Fielding began in June 2001 with the activation of a new CTC at Fort Lewis to support the first IBCT.

Maintenance Support Device (MSD)
(Formerly the Soldier On-System
Repair Tool (SPORT)

Description. The MSD is a lightweight, ruggedized, portable tester employed at all levels of maintenance. It is the Army's standard on-system tester and is used by many different maintenance specialties to automatically diagnose weapon system operations, both electronic and automotive, and identify faulty components for immediate replacement. The MSD and its predecessor, the SPORT, are in wide use throughout the Army's ground combat and CSS vehicle fleets as well as in the Army aviation fleet.

Operational Requirement. The MSD is an essential maintenance tool in the support plans for the Army's ground vehicle and aviation fleets. It provides test and diagnostic support and maintenance automation

capabilities that are critical to the readiness of Army units and their equipment. The MSD hosts interactive

electronic technical manuals and expert diagnostic systems and is used to conduct intrusive testing in support of Army weapons and electronic systems. It also provides a means to upload/download mission-critical



software into weapon system on-board computer processors.

Program Status. The MILTOPE Corporation was recently awarded a five-year contract to develop the MSD. It is currently in full rate production and fielding. A recent change in the basis of issue will provide the MSD to organizational level maintainers at a ratio of 1:3 per maintainer MOS.

Theater Support Vessel (TSV)



Description. The TSV is a high-speed, 40+ knots sealift platform that will maximize commercial off-the-shelf (COTS) ferry technology currently in use in civilian markets. The TSV will support Intra Theater lift requirements and will eventually replace the current watercraft fleet as it reaches economic useful life span. Initial TSVs will meet the requirement for the last five LSVs (for a TAA 07 total requirement of 14 LSVs, of which only eight will be procured). The speed of the TSV will permit flexible stationing options while answering persistent, unresolved JWCA issue of late arrival of Army watercraft in Theaters.

Operational Requirement. The TSV replaces the current generation of Army watercraft to conduct Logistics Over-the-Shore (LOTS)/JLOTS and support

responsiveness goals for Interim and Objective Forces.

Program Status. The ORD was approved 17 January 2000. Currently, one vehicle is being leased for testing purposes to refine and update the ORD.

Medical Communications for Combat Casualty Care (MC4)

Description. The MC4 system is a theater, automated Combat Health Support (CHS) system, which links commanders, health care providers, and medical support providers at all echelons with seamless, integrated medical information. It will receive, store, process, transmit, and report medical C2, medical surveillance, casualty movement/tracking, medical treatment, medical situational awareness, and medical logistics data across all levels of care. The MC4 is fully operational with standard Army systems and operates on standard Army hardware. MC4 is fully joint operations compatible and operates from a family of joint software. MC4 supports the commander with a streamlined personnel deployment system using digital medical information.



Operational Requirement. The MC4 system requirements are designed to provide the warfighter with the CHS digital tools necessary to support the Objective Force by enhancing their ability to project the force, protect the force, and sustain the force. Digital tools significantly

streamline the Soldier readiness process. Teleconsultation provides specialty medical information to maximize the effectiveness of deployed personnel. The MC4 system provides the real-time ability to monitor the medical status of an individual Soldier or unit. Automated medical logistics capabilities increase the effectiveness of theater medical supply by lowering stockpiles and reducing the medical footprint on the battlefield.

Program Status. MC4 is currently pre-Milestone B. The MC4 ORD has been approved by the Joint Requirements Oversight Council (JROC). The MC4 project timeline is closely tied to the Theater Medical Information Program (TMIP) whose Capstone Requirements Document and Block I ORD are both JROC approved.

Focused Logistics Summary

The logistics modernization strategy focuses on developing, testing and evaluating, and procuring those systems that provide key support capabilities for Soldiers and weapon systems while reducing the logprint in the theater of operations and reducing costs without

detracting from warfighting capabilities and readiness. This is essential to meet the requirements of the transformed force for the 21st Century. The implementation of this strategy requires a reduction in the number of vehicles, the leveraging of technology for reach-back capabilities, weapons and equipment designed in a systems approach, and advances in projection and sustainment. The key to achieving this is demand reduction. All ongoing CSS modernization initiatives will result in reduction in demand of some commodity or capability required on the battlefield.

The best trained Soldiers with the most technologically advanced weapons systems will always be reliant on a steady flow of ammunition, fuel, repair parts and services to keep both the Soldier and the equipment performing at their optimal levels. Logistics modernization will capitalize on the technologies, doctrine, and business practices that will enable that stream of supplies and services to flow in a more efficient and effective manner. The end result of this effort will be a logistics force with the same agility and deployability as the combat forces that it supports.